

## New England Common Assessment Program

Released Items 2010

**Grade 4 Mathematics** 

## **Mathematics**



Items with this symbol were selected from Session One—no calculators or other mathematics tools allowed.



- 1 What is 5 hundreds + 18 tens + 3 ones?
  - O A. 583
  - O B. 683
  - O C. 5183
  - O D. 6183

2 You may use this model to help answer the question.

1								
<u>1</u> 2			1/2					
<u>1</u> 3			3		<u>1</u> 3			
<u>1</u>	-	<u>1</u>	<u>1</u>	<u>1</u>	-	<u>1</u>		<u>1</u>
<u>1</u> 8	<u>1</u> 8	<u>1</u> 8	<u>1</u> 8	<u>1</u> 8	<u>1</u> 8	<u>1</u> 8		<u>1</u> 8

Which list shows the fractions in order from **least** to **greatest**?

- O A.  $\frac{1}{3}$ ,  $\frac{5}{6}$ ,  $\frac{2}{8}$
- O B.  $\frac{2}{8}$ ,  $\frac{1}{3}$ ,  $\frac{5}{6}$
- $\circ$  C.  $\frac{1}{3}$ ,  $\frac{2}{8}$ ,  $\frac{5}{6}$
- O D.  $\frac{2}{8}$ ,  $\frac{5}{6}$ ,  $\frac{1}{3}$

- 3 Mrs. Watson bought three different-sized cups for a snack bar. She bought
  - 225 large cups,
  - 500 more medium cups than large cups, and
  - more small cups than medium cups.

Which could be the number of small cups Mrs. Watson bought?

- O A. 275
- O B. 450
- O C. 725
- O D. 850



4 Juliet solved this problem.

Which number sentence can Juliet use to check her work?

- $\bigcirc$  A. 28 16 =  $\square$
- O B.  $28 + 44 = \square$
- $\circ$  C. 44 + 16 =  $\square$
- O D.  $44 28 = \square$



**5** Alex bought 4 boxes of pencils. There were 12 pencils in each box. He wrote this number sentence to show how many pencils he bought.

$$12 + 12 + 12 + 12 = \square$$

Which number sentence also shows how many pencils Alex bought?

- $\bigcirc$  A.  $12 \div 4 = \square$
- O B.  $12 4 = \square$
- $\circ$  C. 4 + 12 =  $\square$
- $\bigcirc$  D.  $4 \times 12 = \square$



- 6 Mitch has \$5.15 in his backpack and \$2.30 in his pocket. How much more money does Mitch have in his backpack than in his pocket?
  - O A. \$2.75
  - O B. \$2.85
  - O C. \$3.25
  - O D. \$3.85



- 7 Scott's father is 26 years older than Scott. Scott's grandfather is 35 years older than Scott's father. Scott's grandfather is 72 years old. How old is Scott?
  - O A. 11 years old
  - O B. 13 years old
  - O C. 21 years old
  - O D. 37 years old

**8** This clock shows the time music class starts.



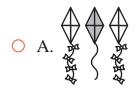
Music class is 40 minutes long. What time will music class end?

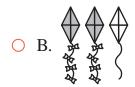
- O A. 12:30
- O B. 11:35
- O C. 11:30
- O D. 10:50

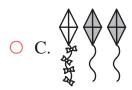
**9** This pattern of kites is a growing pattern.



What are the next three kites in this pattern?

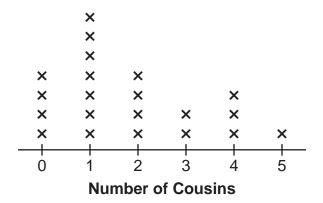






O D.

This line plot shows the numbers of cousins the students in Mr. Durant's class have.



What is the least frequent number of cousins the students in the class have?

- O A. 0
- O B. 1
- O C. 4
- O D. 5



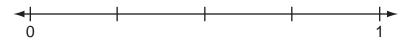
- 11 Madeline used blocks to show the number 52. She used
  - 12 🗇 and
  - some .

**Key**☐ represents 1

How many did Madeline use?



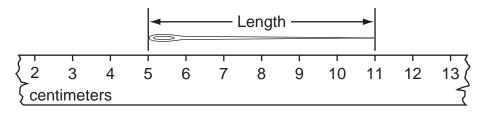
12 You may use this number line to help you answer this question.



Write a fraction that is equivalent to  $\frac{1}{2}$ .



**13** Look at this needle.

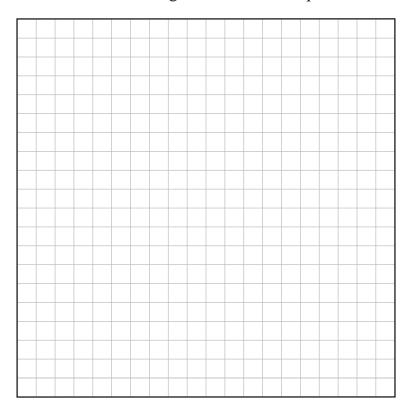


What is the length of this needle to the nearest centimeter?

\_\_\_\_\_ centimeters

14 a. Explain one way that squares and rectangles are alike.

b. On the grid below, draw a rectangle that is not a square.



15 Elke erased a number from this true number sentence.

a. What number did Elke erase?

Anna erased two numbers from this true number sentence. The two numbers Anna erased are the same.

b. What number did Anna erase?



**16** Haley made this table to show the number of different-sized seashells she has in her collection.

## **Seashell Collection**

Size	Number of Seashells				
Small	3				
Medium	6				
Large	4				

Use the information from the table to complete the bar graph below.

- a. Complete the scale on the bar graph.
- b. Draw bars on the graph to show each number of small, medium, and large seashells Haley has in her collection.

## **Seashell Collection**

